

04-544435

- 34 -

#### Abstract

#### Data Processing System

A data processing system, wherein a data flow processor (DFP) integrated  
5 circuit chip is provided which comprises a plurality of orthogonally arranged  
homogeneously structured cells, each cell having a plurality of logically same and  
structurally identically arranged modules. The cells are combined and facultatively  
grouped using lines and columns and connected to the input/output ports of the  
DFP. A compiler programs and configures the cells, each by itself and facultative-  
10 ly grouped, such that random logic functions and/or linkages among the cells can  
be realized. The manipulation of the DFP configuration is performed during  
DFP operation such that modification of function parts (MACROs) of the DFP  
can take place without requiring other function parts to be deactivated or being  
impaired.